

Village of Clinton
2009 Drinking Water Quality Report
June 10, 2010

OVERVIEW.

This Water Quality Report is designed to provide information on the Village's water distribution and treatment systems. It provides information on the Source of Water, Water Testing, Terms and Abbreviations, and Test Results.

The Village gets its water from four wells and treats it with chlorine and polyphosphate. The chlorine is used for disinfection. The polyphosphate sequesters possible sediment build up in the water lines and makes the water less corrosive to your plumbing fixtures. The water is tested for a variety of contaminants on a regular basis. New federal legislation requires the Village to publish a summary of the test results annually to help keep water customers informed about the water they drink.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in our water system. The costs of those improvements may be reflected in the water rates. At this point the Village is seriously investigating the construction of an iron removal plant. If that plant were constructed, the water rates would have to be increased to fund the debt and operating costs.

If you have any questions or concerns about your water utility please contact Mr. George Service, Superintendent of Public Works, 119 E. Michigan, Clinton, Michigan. You may call him at (517) 456-7494, or send e-mail to villageofclinton@tc3net.com. If you want to learn more please contact Mr. Service to schedule a meeting. You can also get information by attending the Clinton Village Council meetings held on the first and third Mondays of each month.

NEW SECURITY MEASURES TAKEN.

As a result of the events of September 11, 2001 the Village of Clinton has taken numerous steps to make the water facilities more secure.

SOURCE WATER ASSESSMENT REPORT

"Your water comes from four groundwater wells, drawing from the River Raisin watershed. The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a six-tiered scale from "very-low" to "high" based primarily on geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our source is rated moderately high for well field number one and moderate for well field number two, three, and four.

The primary source of water is well number 1 located at River and Clark Street. Well number 4 is used as a back up during periods of high usage each day. Wells number 2 and 3 are backup for fire fighting capacity. Wells 2,3 and 4 are located on the west side of the River Raisin at the south end of Tate Park. Well numbers 1, 2 and 3 have depths of 33 to 42 feet. Well number 4 is 112 feet deep. The Village uses well number 1 as a primary source since it has a low level of iron. Well number 4, however, has a very high level of iron.

"Significant sources of contamination include any possible dumping or leakage within 200' of well field number 1 and possible farm run off within 200' of well field number two, three, and four. We are making efforts to protect our sources by taking all necessary security measures and planning to develop more in our well head protection plan in the near future.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.”

The state also requires monitoring of some constituents less than annually. There are many constituents that are tested for quarterly, annually, and every third year. Of all these constituents tested, the Village of Clinton’s well water had only a few contaminants at the detectable level. Of those, none were at a level of any health concern requiring a change in the treatment process. The Village’s drinking water met or exceeded all Federal and State requirements last year

Minimum Contamination Levels (MCL) is set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 800 426-4791. A list of these microbiological contaminants is also available at the Village Office.

TERMS AND ABBREVIATIONS.

The table uses many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

- Non-Detect (ND) - Laboratory analysis indicates that the constituent is not present.
- Parts per million (ppm) or Milligrams per liter (mg/l) - One part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion (ppb) or Micrograms per liter - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.
- Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Contaminant Level (MCL) - The “Maximum Allowed” MCL is the highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG’s as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal - The “Goal” (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.

Maximum residual disinfectant level goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG’s do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Disinfectant Byproducts: Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5)

	Violation Y/N	Level Detected	Range of Detection	Date of Sampling	MCLG	MCI	Likely Source of Contamination
TTHM Site 1 (ppb)	N	11.0	11-12	2007 next 2010	NA	80	By-product of Drinking Water Chlorination
TTHM Site 2 (ppb)	N	12.0	11-12	2007 next 2010	NA	80	By-product of Drinking Water Chlorination
HAA5 Site 1 (ppb)	N	ND	ND-2	2007 next 2010	NA	60	By-product of Drinking Water Chlorination
HAA5 Site 2 (ppb)	N	2	ND-2	2007 next 2010	NA	60	By-product of Drinking Water Chlorination

Chlorine Residual

Chlorine or Chloramines	Violation Y/N	Level Detected	Range of Detection	Date of Sampling	MRDL	MR DLG	Likely Source of Contamination
Bacteriological Sample Site #1	N	.222	.04-.45	2009 monthly	4	4	Water additive used to control microbes
Bacteriological Sample Site #2	N	.155	.04-.45	2009 monthly	4	4	Water additive used to control microbes
Monthly Average of Samples	N	.190		2009 monthly	4	4	
RAA Computed Quarterly	N	.190		2009 monthly	4	4	

Chlorine Residual

Chlorine or Chloramines	J	F	M	A	M	J	J	A	S	O	N	D
Bacteriological Sample Site #1	.22	.29	.32	.36	.18	.18	.32	.24	.04	.10	.17	.25
Bacteriological Sample Site #2	.16	.18	.03	.34	.06	.36	.38	.20	.02	.03	.10	.13
Monthly Average of Samples	.19	.23	.17	.35	.12	.27	.35	.22	.03	.07	.09	.19
RAA Computed Quarterly	-	-	.19	-	-	.25	-	-	.20	-	-	.12

Maximum residual level chlorine is 4.0

Chlorine goal is 4.0